

REMARKS

Claims 1, 2 and 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,910,829 to Shimada et al. Applicants respectfully traverse this rejection.

Applicants have added the subject matter of dependent Claim 4 into independent Claim 1. As correctly acknowledged by the Examiner on lines 4-5 of page 4 of the May 18, 2005 Office Action, the Shimada et al. reference fails to disclose that the first and second electrodes are connected to a common voltage (a feature previously defined in now-cancelled dependent Claim 4). To remedy this deficiency, the Examiner relied on United States Patent Application Publication No. 2002/0196393 to Tashiro et al. in a §103 rejection based on the combination of Shimada et al. in view of Tashiro et al. Since the subject matter of dependent Claim 4 has been incorporated into independent Claim 1, Applicants will respond to this §103 rejection of Claim 4 as it would apply to amended Claim 1.

Applicants respectfully submit that neither the Shimada et al. reference nor the Tashiro et al. reference, alone or in combination, disclose or suggest all of the features defined in amended independent Claim 1. More specifically, neither Shimada et al. nor Tashiro et al. disclose or suggest the claimed liquid crystal display panel with a frame area that includes, *inter alia*, color filters, a first electrode and a second electrode, where “the first electrode and the second electrode are connected to a common voltage.”

One of the objects of the present invention is to provide enhanced performance for the frame of an LCD. In the preferred embodiment, the LCD panel provides enhanced

frame performance without using a BM layer, while avoiding display spots near the frame, and also avoiding unintended coloring of the frame. Instead of using a BM layer, the present invention connects the first and second electrodes to a common voltage in the frame area. Thereby, light passing through the plurality of color filters that are located in the frame area combine to make the frame area appear black.

As correctly acknowledged by the Examiner, the Shimada et al. reference lacks any disclosure that the first and second electrodes in the frame area are connected to a common voltage. Accordingly, the Examiner relied upon Tashiro et al. for this feature.

Applicants respectfully submit that although Figure 42b of the Tashiro et al. reference does show electrodes 58 and 60 connected to a common voltage, the purpose, structure and time period for use of such a configuration are all different from those of the present invention. The purpose of electrodes 58 and 60 in Tashiro et al. is to reduce degradation of the liquid crystal when curing the sealing material 6. *See* col. 28, paragraph [0336]. More specifically, when irradiating UV light to cure the sealing material 6, voltage is applied to electrodes 58 and 60 in Tashiro et al. to vertically align the liquid crystal molecules so that they are parallel with the irradiation direction of the UV irradiation light, thereby suppressing degradation of the liquid crystal. Thus, electrodes 58 and 60 of the Tashiro et al. reference appear to be used only when curing the sealing material 6, i.e., when the LCD is first manufactured.

In contrast, the present invention utilizes the first and second electrodes connected to a common voltage during the normal operation of the LCD, not just during the

manufacturing process. Thus, the time for using the electrodes differs between the present invention and the Tashiro et al. reference.

Further, in the present invention, the first and second electrodes in the frame area are utilized to allow light to pass through the frame area after passing through the color filters, whereby the combined light makes the frame area appear black. Thus, the purpose of the electrodes of the present invention differs from that of the Tashiro et al. reference. Additionally, Tashiro et al. Figure 43b lacks color filters, thereby making the structure of Tashiro et al. different from the present invention, and from the Shimada et al. reference. Accordingly, due to these differences, Applicants respectfully submit that one of ordinary skill in the art would not have been motivated to combine Tashiro et al. with Shimada et al. in the manner suggested by the Examiner. And further, even assuming *arguendo* that such a combination was made, the resulting combination would not include all of the features of independent Claim 1. Accordingly, for at least these reasons, Applicants respectfully submit that independent Claim 1 and associated dependent Claims 2 and 5 should not be rejected under 35 U.S.C. §103 as being obvious over the combination of Shimada et al. and Tashiro et al.

Claim 3 stands rejected under 35 U.S.C. §103 as being unpatentable over Shimada et al. in view of United States Patent Application Publication No. 2005/0083471 to Ono et al. Applicants respectfully traverse this rejection.

Claim 3 depends from independent Claim 1, and therefore includes all of the features of Claim 1, plus additional features. Accordingly, Applicants respectfully request

that the § 103 rejection of dependent Claim 3 under Shimada et al. in view of Ono et al. be withdrawn considering the above remarks directed to independent Claim 1, and also because the Ono et al. reference does not remedy the deficiencies noted above.

Claim 6 stands rejected under 35 U.S.C. §103 as being unpatentable over Shimada et al. in view of United States Patent No. 6,259,505 to Makino. Applicants respectfully traverse this rejection.

Claim 6 depends from independent Claim 1, and therefore includes all of the features of Claim 1, plus additional features. Accordingly, Applicants respectfully request that the § 103 rejection of dependent Claim 6 under Shimada et al. in view of Makino be withdrawn considering the above remarks directed to independent Claim 1, and also because the Makino reference does not remedy the deficiencies noted above.

Claim 7 stands rejected under 35 U.S.C. §103 as being unpatentable over Shimada et al. in view of United States Patent No. 5,978,061 to Miyazaki et al. Applicants respectfully traverse this rejection.

Claim 7 depends from independent Claim 1, and therefore includes all of the features of Claim 1, plus additional features. Accordingly, Applicants respectfully request that the § 103 rejection of dependent Claim 7 under Shimada et al. in view of Miyazaki et al. be withdrawn considering the above remarks directed to independent Claim 1, and also because the Miyazaki et al. reference does not remedy the deficiencies noted above.

Claim 8 stands rejected under 35 U.S.C. §103 as being unpatentable over Shimada et al. in view of United States Patent No. 6,348,958 to Matsuoka et al. Applicants respectfully traverse this rejection.

Claim 8 depends from independent Claim 1, and therefore includes all of the features of Claim 1, plus additional features. Accordingly, Applicants respectfully request that the § 103 rejection of dependent Claim 8 under Shimada et al. in view of Matsouka et al. be withdrawn considering the above remarks directed to independent Claim 1, and also because the Matsouka et al. reference does not remedy the deficiencies noted above.

Finally, Applicant's have added new dependent Claims 9-14. Applicants respectfully submit that new dependent Claims 9-14 are allowable for at least the same reasons that render independent Claim 1 allowable.

For all of the above reasons, Applicants request reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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